Barium meal.—No abnormality.

No evidence of latent tetany, as shown by negative Trousseau's and Chvostek's signs.
W.R. and Kahn negative.
Prothrombin time 18·5 sec. Normal control 17 sec.
B.S.R. (Westergren) 1 hr. 10 min.; 2 hr. 22 min.

Biopsy of skin.—A chronic lichenified dermatitis. Hyperpigmentation of basal layer. No hæmosiderin present in section.

Sternal marrow.—Indefinite conclusion. Liver therapy and folic acid had been given to patient for a few days and this in all probability had altered the bone-marrow picture.

Treatment.—Fat-free diet; multivitamin therapy; crude liver extract (Livadex) 5 c.c. on alternate days; ferrisulph. 6 grains t.d.s. Ac hydrochlor. dil ½ drachm t.d.s. On this treatment the patient's general condition has improved dramatically, likewise the dermatitis. As yet the blood picture shows little change.

Conclusion.—A case of idiopathic steatorrhœa presenting as a chronic pigmented and pruriginous dermatosis: the skin eruption resulting from inadequate absorption due to intestinal dysfunction. The dermatological picture is not specific for idiopathic steatorrhœa but may occur in any chronic intestinal disorder resulting in inadequate absorption. The unusual factor in this case was the development of an intestinal obstruction due to a volvulus.

Dr. P. J. Feeny: I suggest that this condition is lichen planus.

Dr. Wigley: That did occur to us, but the histology did not bear it out.

Psoriasis Treated with Calciferol.—THERESA KINDLER, M.D.

The discovery by Dowling, Prosser Thomas and Charpy of the treatment of lupus vulgaris with high doses of vitamin D_2, suggested that other skin diseases responsive to heliotherapy, such as acne and psoriasis, might benefit by similar treatment.

A few cases of indurated acne so treated proved disappointing, an initial improvement being soon followed by recurrence.

Psoriasis promised better response. In America Krafka, Ceder and Zon, Brunsting, and Clarke, treated psoriasis with vitamin D, partly with encouraging results. Benziger and Schmitz in Switzerland applied massive doses to 18 cases and the former claimed complete recovery in 60% of the cases.

The patients I showed because of their good response to medium doses of calciferol are 5 out of 31 cases, mostly women and children, who have been treated at the London Hospital, Royal Free and Bermondsey Mission Hospital. The material was mixed in respect of age, duration and type of the disease.

In 12 of these cases the eruption has completely or almost completely disappeared. These included chronic and generalized cases, who, after a period of unsuccessful local treatment, responded dramatically to calciferol within a few weeks or months. Sometimes a few lesions persisted on elbows, knees or elsewhere after the generalized eruption had disappeared. Some of the patients had a mild relapse within four weeks to three months, but most of the latter responded readily to local treatment with or without calciferol. The ointments used were usually the same as before the calciferol treatment and were generally mild, so that the effect could not be wholly attributed to them.

Of the remaining 19 patients, 7 improved, but progress was slower and may have been due to local therapy.

In 6 of the cases there was no response, amongst them being 2 patients with severe psoriasis arthropathica. One of the latter improved temporarily; one case became worse. In 3 cases the drug had to be stopped because of intolerance. 2 patients defaulted after the first few attendances.

Considering the relationship of ultraviolet light and vitamin D it was remarkable that in two cases where ultraviolet light failed or caused aggravation vitamin D succeeded. It was also notable that in cases of irritating inflammatory psoriasis where ultraviolet light frequently provokes a fresh outbreak, the vitamin D acted as an anti-inflammatory and anti-pruritic agent. In this connexion the experiments of Dainow which demonstrate the anti-allergic properties of massive doses of vitamin D_2 are interesting.

Because of the potential toxicity of vitamin D I did not feel justified in applying in this comparatively harmless condition the high doses of 250,000 to 400,000 units used by the authors I quoted. In most cases I gave 50,000 i.u. daily to adults, 25,000 i.u. to children. Sometimes the dose in adults was increased to 100,000 i.u. daily. The urine was tested periodically and the patients were watched for clinical signs of toxicity. Serum calcium estimation was done in a number of cases. Even with my lower doses two patients had to

stop the treatment because of gastric pain, another had nausea after three month of treatment, a male patient complained of tiredness, loss of appetite, depression. The other patients felt well, some of them more active and fit than before the treatment.

It remains to be seen how long the effect will last; even if it is only transient calciferol may, in combination with other treatment, have a place in the therapy of some of the resistant cases.

I wish to thank Dr. W. J. O'Donovan and Dr. R. T. Brain for their help and encouragement and for permitting me to treat the cases in the London Hospital and Royal Free Hospital.

Details of the 5 illustrative cases shown by Dr. Kindler may be published later in the *British Journal of Dermatology*.

REFERENCES

BENZIGER, A. (1945) *Praxis*, **34**, 635.
BRUNSTING, L. A. (1938) *Proc. Staff. Lect. Mayo Clinic*, **13**, 280.
CEDER, E. T., and ZON, L. (1937) *Publ. Hlth. Rep.*, **52**, 1580.
CHARPY, J. (1943) *Ann. Derm. Syph. Paris*, 8e Serie, **3**, 331.
CLARKE, G. E. (1940) *Arch. Derm.*, **41**, 664.
DAINOW, I. (1947) *Dermatologica*, **94**, 130
DOWLING, G. B., THOMAS, E. W. PROSSER (1945) *Proc. R. Soc. Med.*, **39**, 96.
KRAFKA, J. J. (1936) *Lab. clin. Med.*, **21**, 1147
SCHMITZ, H. (1947) *Praxis*, **36**, 307.

Dr. R. T. Brain: While I am sure that Dr. Kindler is correct in her observations and has presented her case for the treatment of psoriasis with calciferol with restraint, it is well known that psoriasis may respond, at least temporarily, to any new treatment. For example, I had a case of generalized psoriasis of the exfoliative type which defied all treatment and was about six months in hospital. On discharge he was treated with large doses of ascorbic acid and cleared up completely within three months, and a subsequent relapse was again controlled by vitamin C. I have never been able to repeat this success. I think that the psychological benefit of some dramatic improvement, although temporary, in the course of a chronic disease justifies experimental therapy of this sort.

Dr. B. C. Tate: I have treated a number of cases of psoriasis with calciferol, but although we seemed to get very good results in some cases, when these were subjected to precise statistical investigation no significant difference from controls was shown.

? **Parakeratosis Scutularis.**—BETHEL SOLOMONS, Jnr., M.D. (for A. PORTER, M.R.C.P.).

S. McL., male, aged 66.

History.—Thirty-four years ago a scaly rash appeared on the elbows, forearms, and the anterior aspect of the lower limbs from the middle-third of the thighs to the ankles. Heaped-up lesions began to appear within six months, some of which resolved, leaving scars. There are no subjective symptoms. He has tried numerous local applications without benefit. The only internal medicine he had been taking was aspirin. Potassium iodide was given for a month without effect.

Family and personal history.—Nil relevant.

Present condition.—Well-built, tall man. No abnormality found on general examination. Hair, nails, and mouth normal. The skin of the lower limbs shows keratotic masses, which are whitish or yellowish and laminated, varying in size and shape. They are not easily detachable. No bleeding occurs on removal but the under-surface is horny.

The lower limbs also show deep and irregular scars, some of which are adjacent to the keratotic masses, whilst others are separate. The surface in some places is of tissue paper consistency, in others it is hard. Elsewhere the skin of the lower limbs is deeply pigmented.

Similar lesions are present on the elbows which are slightly infiltrated, raised, and covered with silvery scales, suggesting psoriasis.

Investigations.—Blood W.R. and Kahn negative on three occasions. R.B.C. 4,870,000; Hb 95%; total W.B.C. 10,400 per c.mm. (polys. 72%, lymphos 19·5%, monos. 8·0%, eosinos. 0·5%).

Histology (Dr. Haber).—The epidermis shows very marked parakeratosis, which is several times the thickness of the normal skin. It is arranged in whorls, containing well-defined nucleated cells, as well as several micro-abscesses in between the layers. In some places there is solid hyperkeratosis which extends deeply into some dilated follicles.

There is irregular acanthosis, with inter- and intra-cellular œdema, and immigration